

REMARKS

Claims 1-5 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claims 1-19, 22, and 26-28 stand rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent Number 6,498,038 to Berkowitz et al. (hereinafter "Berkowitz"). Claims 20-21 and 23-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Berkowitz in view of United States Patent Number 5,835,953 to Ohran (hereinafter "Ohran").

For the Examiner's convenience and reference, Applicants' remarks are presented in substantially the same order in which the corresponding issues were raised in the Office Action. Please note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references.

Applicants thank the Examiner for the interview of January 18, 2006, and for allowing Applicants to present the arguments for the claims as amended that are included below. Claims 1, 2, 6, 7, 13, 16, 23, and 26 are amended to more particularly point out and distinctly claim the subject matter of the claimed invention. The amendments are fully supported by the specification and introduce no new material to the claims. Claims 15, 17, 24, and 27 are canceled. Three paragraphs of the specification are amended to correct spelling and grammatical informalities.

Response to rejections of claims under 35 U.S.C. § 101

Claims 1-5 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicants respectfully traverse the rejection.

The Commissioner has stated "...that computer programs embodied in a tangible medium, such as floppy diskettes, are patentable subject matter under 35 U.S.C. § 101 and must be examined under 35 U.S.C. § 102 and 103." *In re Beauregard*, 53 F.3d 1583, 1584 (Fed. Cir. 1995). Applicants assert that the "...computer readable storage medium comprising computer readable program code..." of claims 1-5, 26, and 28 is a computer program embodied in a tangible medium, and is therefore statutory subject matter under 35 U.S.C. § 101.

Response to rejections of claims under 35 U.S.C. § 102.

Claims 1-19, 22, and 26-28 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Berkowitz. Applicants respectfully traverse this rejection.

With regards to independent claims 1, 6, 13, 16, and 26, Applicants submit that Berkowitz does not anticipate the claims as amended as Berkowitz does not teach each element of the claims. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).

Claims 1, 6, 13, 16, and 26 are amended with the limitations of original claims 2, 7, 15, 17, and 27 that the snapshot criteria includes "...an auto-select target indicator data field..." Claim 1 as amended. See also claims 6, 13, 16, and 26 as amended. The amendment is well

supported by the specification, which describes the data fields in a snapshot criteria data structure. Page 13, Lines 24-27, Fig. 6, Refs. 620, 622, 624, 632, 634, 636.

In contrast, Berkowitz does not teach an auto-select target indicator. Berkowitz teaches a provider controlling a subsystem to generate a point-in-time copy of a logical unit number ("LUN"). Berkowitz, Col. 8, Lines 22-28. However, Berkowitz does not teach indicating whether a flash copy should be created at a specified target, or if a target should be auto-selected as claimed by the embodiment of the present invention. Ohran also does not teach an auto-select target indicator. Therefore, Applicants assert that claims 1, 6, 13, 16, and 26 are allowable as Berkowitz does not teach each element of claims 1, 6, 13, 16, and 26.

Claim 2 and claims 6, 13, 16, and 26 as amended also include the limitation of original claims 7, 15, 17, and 27 of a background copy data field. The amendment is well supported by the specification, which describes the background copy data field in the snapshot criteria data structure. Page 13, Lines 24-27, Fig. 6, Ref. 624.

Berkowitz does not teach a background copy data field. In addition, Berkowitz does not teach specifying whether the flash copy should be generated as a foreground operation or in the background. Therefore, Applicants further assert that claims 2, 6, 13, 16, and 26 are allowable.

Claims 2 and 7 and claims 13, 16, and 26 as amended further include the limitation of the original claims 15, 17, and 27 of a redundancy level indicator data field. The amendment is well supported by the specification, which describes the redundancy level indicator data field in the snapshot criteria data structure. Page 13, Lines 24-27, Fig. 6, Ref. 630.

In contrast, Berkowitz does not teach a redundancy level indicator data field. Berkowitz

does disclose a redundant array of independent drives ("RAID") as a target of a provider. Berkowitz, Col. 8, Lines 40-44. However, Berkowitz does not teach specifying the redundancy level of the provider, such as specifying a RAID 5 storage subsystem. Applicants therefore respectfully submit that claims 2, 7, 13, 16, and 26 are allowable as Berkowitz does not teach the redundancy level indicator data field.

Claims 15, 17, and 27 are canceled. Applicants have not specifically traversed the rejections of claims 3-5, 8-12, 14, 18, 19, 22, and 28 under 35 U.S.C. § 102(e). However, Applicants submit that claims 3-5, 8-12, 14, 18, 19, 22, and 28 are allowable as depending from allowable claims.

Response to rejections of claims under 35 U.S.C. § 103(a)

Claims 20-21 and 23-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Berkowitz in view of Ohran. Applicant respectfully traverses these rejections.

It is well settled that the PTO has the burden to establish a *prima facie* case of obviousness. *In re Glaug*, 2002 U.S. App. Lexis 4246, *4 (Fed. Cir. March 15, 2002); MPEP §2142. "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." MPEP §2143.03 (emphasis added). The Federal Circuit has held that "the 'subject matter' that must have been obvious to deny patentability under §103 is the entirety of the claimed invention," *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1576 (Fed. Cir. 1987). "This 'as a whole' assessment of the invention requires a showing that an artisan of ordinary skill in the art at the time of invention, confronted by the

same problems as the inventor and with no knowledge of the claimed invention, would have selected the various elements from the prior art and combined them in the claimed manner.”

Princeton Biochemicals, Inc. v. Beckman Coulter, Inc., 411 F.3d 1332, 1337 (Fed. Cir. 2005).

Furthermore, even if all the claim limitations are taught or suggested, there must be some suggestion or motivation to combine reference teachings. *See* MPEP §2142. Applicant respectfully asserts that a *prima facie* case of obviousness has not been made because not all the elements recited in the claims are taught or suggested by the prior art and there is no teaching or suggestion in the art to produce the claimed invention.

The legal and PTO framework for determining claim term meaning is clear. First, “[c]laims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their ‘broadest reasonable interpretation’.” *In re Marosi*, 710 F.2d 799, 802 218 USPQ 289 292 (Fed. Cir. 1983). Second, “[t]he broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999). MPEP §2111. And third, “[t]he words of a claim must be given their “plain meaning” unless they are defined in the specification. “[P]lain meaning” refers to the meaning given to the term by those of ordinary skill in the art” MPEP §2111.01. Therefore, the claim term fitness value is to be interpreted in light of the specification and consistent with an interpretation those of skill in the art would give the term. Furthermore, where a term is defined in the specification that definition should control the interpretation.

With regards to claims 20 and 21, Applicants assert that the claims are allowable as

depending from the allowable claim 16 as discussed above. In addition, Applicants respectfully disagree that Ohran teaches the "...initiating a plurality of fast replication operations as specified by the snapshot set are *conducted across multiple volumes* and multiple controllers..." of claim 20. Claim 20. Emphasis added. Ohran does teach making backup copies from multiple storage devices. Ohran, Fig. 1, Ref. 24, Col. 8, Lines 31-33. However, Ohran does not teach making backup copies from across multiple volumes. Therefore, Applicants submit that claim 20 cannot be unpatentable over Berkowitz in view of Ohran and is allowable.

With regards to claims 23, Applicants have amended claim 23 with the limitations of claim 24. In particular, claim 24 is amended with the limitations of an auto-select target indicator data field, a background copy data field, and a redundancy level data field. As discussed above, Berkowitz does not teach the auto-select target indicator data field, the background copy data field, and the redundancy level data field. In addition, Ohran also does the auto-select target indicator data field, the background copy data field, and the redundancy level data field. Therefore, Applicants submit that claim 23 cannot be unpatentable over Berkowitz over Ohran as neither Berkowitz nor Ohran teach all of the limitations of the claim, and that claim 23 is allowable.

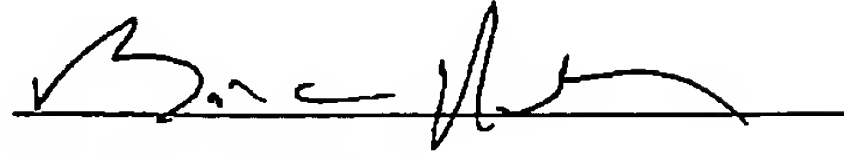
With further regards to claims 20, 21, 23, and 25, Applicants submit that there is no *prima facie* case of obviousness as the teaching or suggestion to combine Berkowitz and Ohran can only be found in the Applicant's disclosure. Berkowitz is directed to making point-in-time copies of LUNs. Berkowitz, Abstract. Ohran teaches preserving a consistent state while making a backup copy. Ohran, Abstract. Although both Berkowitz and Ohran are related to making

backup copies, there is no suggestion to combine the references except in the Applicant's disclosure.

The Federal Circuit has held that it is "impermissible to use the claims as a frame and the prior art references as a mosaic to piece together a facsimile of the claimed invention." *Uniroyal v. Rudkin-Wiley*, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988) (citing *W. L. Gore & Associates v. Garlock, Inc.*, 220 USPQ 303, 312). The only suggestion to combine the LUN backup copy teaching of Berkowitz with the consistent state backup copy disclosure of Ohran is provided by the embodiment of the present invention. Applicants therefore assert that claims 20, 21, 23, and 25 are allowable as there is no suggestion to combine Berkowitz with Ohran. Claim 24 is canceled. Applicants assert that claim 25 is also allowable as depending from the allowable claim 23.

As a result of the presented remarks, Applicants assert that claims 1-14, 16, 18-23, 25-26, and 28 are in condition for prompt allowance. Should additional information be required regarding the traversal of the rejections of the dependent claims enumerated above, Examiner is respectfully asked to notify Applicants of such need. If any impediments to the prompt allowance of the claims can be resolved by a telephone conversation, the Examiner is respectfully requested to contact the undersigned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Brian C. Kunzler', is written over a horizontal line.

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